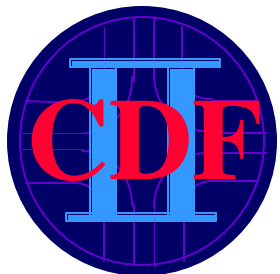


# CDF Status Report

Eric James

October 21<sup>st</sup>, 2002

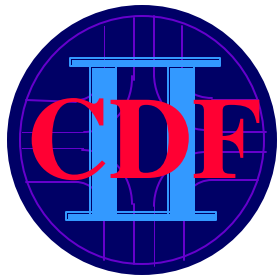
All Experimenters' Meeting



## Store Summary

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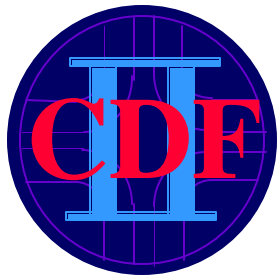
Store	Date	Init Lum	Int Lum	Lum to Tape	Eff
1845	M 10/14	31.8e30	715.1 nb <sup>-1</sup>	628.5 nb <sup>-1</sup>	87.9
1863	W 10/16	26.0e30	861.9 nb <sup>-1</sup>	700.0 nb <sup>-1</sup>	81.2
1865	R 10/17	35.6e30	841.9 nb <sup>-1</sup>	705.7 nb <sup>-1</sup>	83.8
1886	Sa 10/19	36.6e30	1528.1 nb <sup>-1</sup>	1207.7 nb <sup>-1</sup>	79.0
Total			3947.0 nb <sup>-1</sup>	3241.9 nb <sup>-1</sup>	82.1



## Records

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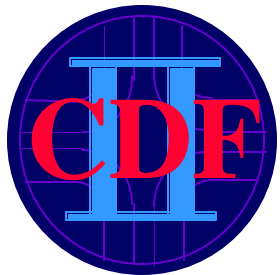
- Luminosity Delivered (Store) =  $1528.1 \text{ nb}^{-1}$
- Luminosity to Tape (Store) =  $1207.7 \text{ nb}^{-1}$
- Luminosity Delivered (Shift) =  $712.7 \text{ nb}^{-1}$
- Luminosity to Tape (Shift) =  $586.3 \text{ nb}^{-1}$
- Efficiency to Tape (Shift w/ shot-setup) = 91%
- Efficiency to Tape (Shift w/o shot-setup) = 99%



## High Luminosity Trigger Table

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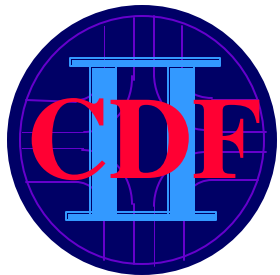
- In the last several weeks we had begun to incur increasing DAQ deadtime at the higher peak luminosities delivered by the collider.
- A substantial amount of effort has been spent on the development of a new trigger table that will allow us to run at higher luminosities without incurring deadtime.
- This new trigger table was successfully implemented at the start of the store in progress.



## Trigger Table Modifications

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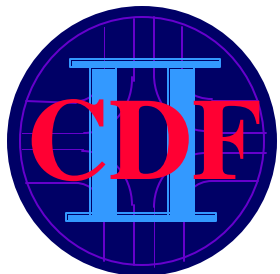
- L1 – Good to 5e31.
  - Move to one-miss algorithm for L1 track trigger.
  - Add scintillator requirement for muons with  $0.6 < |\eta| < 1.0$ .
  - Utilize dynamic pre-scaling for non-leptonic b triggers.



## Trigger Table Modifications

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- L2 – Good to  $5e31$ 
  - New/improved algorithms for high  $P_T$  muon triggers, taus, and b jets.
  - Rate limits on calibration triggers.
- L3 – Good to  $4.5e31$ 
  - Adjust pre-scales for calibration triggers.
  - Work in progress to update L3 filter algorithms to match latest offline reconstruction and reduce event size.



# COT Diagnostic Tools

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